

# Phosphorus

## Handheld Colorimeters

- Easier to use and more accurate than chemical test kits
- Dedicated to a single parameter
- Small size, big convenience
- Ideal for aquaculture

Plants, algae and phytoplankton require phosphorus for nourishment and utilize phosphorous as a component of cell tissue. When organic matter such as plant tissue, dead fish, algae, or uneaten food breaks down aerobically (with oxygen), phosphate is produced. This results in rapid oxygen depletion of aquarium water, which in turn suffocates aquatic life and compounds the problem.

Phosphorus concentration in water is monitored because it causes corrosion when present in levels too high.

Both the Hanna HI736 and HI706 Checker®HC's bridge the gap between simple chemical test kits and professional instrumentation. The Hanna HI736 (for marine applications) and HI706 (for fresh water applications) are both accurate and affordable.

The HI736 Checker HC portable handheld colorimeter features a resolution of 1 ppb and  $\pm 5$  ppb  $\pm 5\%$  of reading accuracy and uses an adaptation of the Ascorbic Acid.



SPECIFICATIONS	HI736 (Marine ULR)	HI706 (HR)
Range	0 to 200 ppb	0.0 to 15.0 ppm
Resolution	1 ppb	0.1 ppm
Accuracy @25°C (77°F)	$\pm 5$ ppb $\pm 5\%$ of reading	$\pm 0.3$ ppm $\pm 5\%$ of reading
Light Source	LED @ 525 nm	
Light Detector	silicon photocell	
Environment	0 to 50°C (32 to 122°F); RH max 95% non-condensing	
Battery Type	1.5V AAA (1)	
Auto-off	after three minutes of non-use and two minutes after reading	after ten minutes of non-use and two minutes after reading
Dimensions	86.0 x 61.0 x 37.5 mm (3.4 x 2.4 x 1.5")	
Weight	64 g (2.3 oz)	
Method	daptation of the Standard Methods for the Examination of Water and Wastewater, 20th edition, Ascorbic Acid method. The reaction between phosphorus and the reagent causes a blue tint in the sample	adaptation of the Standard Methods for the Examination of Water and Wastewater, 18th edition, Heteropolymolybdenum Blue method. The reaction between reactive phosphorus and the reagent causes a blue tint in the sample.
ORDERING INFORMATION	<p><b>HI736</b> Checker®HC is supplied with sample cuvettes with caps (2), marine phosphorus ULR reagent starter kit (reagents for 6 tests), battery, instructions, and quick start guide.</p> <p><b>HI706</b> Checker®HC is supplied with sample cuvettes with caps (2), phosphorus HR reagent starter kit (reagents for 20 tests), battery, instructions, and quick start guide.</p>	
Reagent Set	<b>HI736-25</b> (25 tests)	<b>HI706-25</b> (40 tests)
Calibration Set	<b>HI736-11</b>	<b>HI706-11</b>